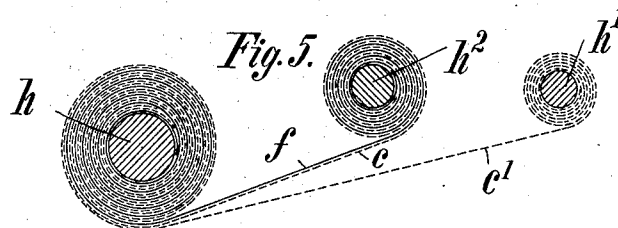
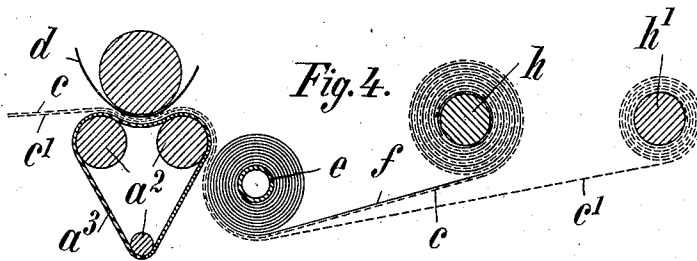
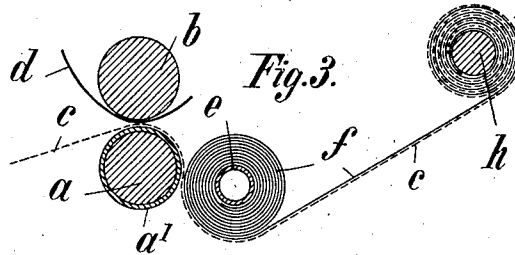
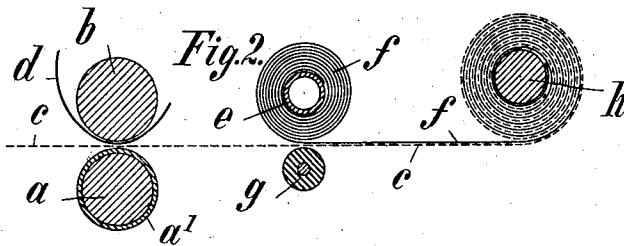
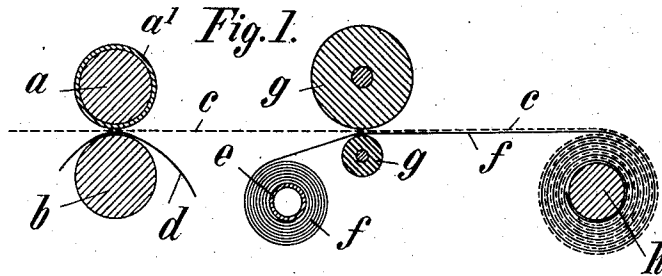


F. G. J. POST.
METHOD OF PRODUCING MULTIPLE AND BACKED COPIES.
APPLICATION FILED FEB. 3, 1905.



Witnesses.

Harry L. Amer.

M. Sommers

Inventor:

Friedrich Gustav Julius Post.

by *Henry Orth* atty.

UNITED STATES PATENT OFFICE.

FRIEDRICH GUSTAV JULIUS POST, OF HAMBURG, GERMANY, ASSIGNOR TO
JULIUS H. W. CAMPE, OF HAMBURG, GERMANY.

METHOD OF PRODUCING MULTIPLE AND BACKED COPIES.

No. 858,023.

Specification of Letters Patent.

Patented June 25, 1907.

Application filed February 3, 1905. Serial No. 244,017.

To all whom it may concern:

Be it known that I, FRIEDRICH GUSTAV JULIUS POST, a subject of the German Emperor, and a resident of Hamburg, in the German Empire, have invented certain new and useful Improvements in the Method of Producing Multiple and Backed Copies, of which the following is a full, clear, and exact specification.

This invention has for its object the treatment of copies while still damp for the purpose of obtaining backed (back-lined) or strengthened (stiffened) copies or of multiplying them. In order to attain the desired object the copies while still damp are again submitted to pressure together with paper rolls or paper webs, presenting copying or adhesive properties.

In the accompanying drawing I have illustrated diagrammatically by Figures 1-5 several constructional forms of a device for carrying the invention into practice.

In the arrangement illustrated in Fig. 1 a dampened web of copying paper *c* passes between pressure rollers *a b* of a copying machine, one of the rollers being covered with a suitable covering *a'* of rubber or the like, or, as shown in Fig. 4, three rollers *a²* having an endless apron *a³* passing around them may be substituted. A sheet of manuscript, *d* to be copied accompanies the web *c* through the copying machine, and said web is then conducted through pressure rollers *g, g*, in company with a suitably prepared web *f* stored on a roller *e*. The webs *c* and *f* leaving these pressure rollers may then be wound upon a suitable drum *h*. As the copying web *c* will have yielded its moisture to the web *f*, it is, of course, impossible for the ink to run. Whether the web *f* consists of copying paper or is provided with an adhesive coating (of gum arabic, dextrine, or the like) either a second copy or a perfectly smooth backed original copy, is obtained; in either case it is not possible for the ink on these copies to run. If desired it is possible to again separate the backed copy, by stripping off the copying paper from the gummed paper immediately after the sticking together of the webs and while they are still in a moist condition. When this is done there is obtained upon the gummed paper an exceedingly clear and sharp positive copy, while the original copy (that is to say the copying paper which has

been stripped off) will have taken up a portion of the adhesive substance, and will have thus become somewhat stiffened. This copy may then be caused to adhere, by means of the adhesive substance that it has taken up, to another web of ordinary paper, while a thin, transparent web may be applied to the side of the paper web *f* which is still adhesive.

In the arrangement illustrated in Fig. 2, one of the pressure rollers *g* may be replaced directly by the paper roller *e f*. This arrangement is preferable for cases in which the paper roller *f* is used moist, as in this case but slight pressure is required for obtaining the copy.

In the arrangement illustrated in Fig. 3, both pressure rollers are dispensed with, by carrying the web of copying paper *c* directly against and around the paper roller *e f*. If the web of copying paper is permitted to remain upon the web *f* of gummed paper, only one copy is obtained, but this is sharp, clear and considerably strengthened, while it is already so dry that running of the impression is impossible. In order to obtain a second copy simultaneously, a second web of copying paper *c'* must be caused to pass through the machine with the first, as shown in Fig. 4; this second web *c'* being wound upon a separate receiving drum *h'*. If desired, however, all three webs of paper *f, c* and *c'* may be wound together upon the same drum *h* (see Fig. 5), the simple copy *c'* being then wound therefrom on to the drum *h'*, while the backed copy *c f* is wound upon another drum *h²*. It will of course be understood that it is possible to employ webs *f* gummed upon both sides, in which case a web of copying paper is applied to each side.

Having fully described my invention what I do claim and desire to secure by Letters Patent is:—

1. The method of producing copies consisting in subjecting to pressure a dampened web of copying material accompanied by manuscript sheets and again subjecting the dampened web to pressure accompanied by an adhesive web.

2. The method of producing copies, consisting in subjecting to pressure a dampened web of copying material accompanied by manuscript sheets, again subjecting the dampened web to pressure accompanied by an

adhesive web and then separating the dampened and adhesive webs.

3. The method of producing copies, consisting in subjecting to pressure a dampened web of copying material accompanied by a manuscript, then subjecting the dampened web to pressure accompanied by an adhesive web, separating the dampened and adhesive webs and applying a transparent web to the separated adhesive web.

4. The method of producing copies, consisting in subjecting to pressure a dampened web of copying material accompanied by manuscript sheets, subjecting the dampened web to pressure accompanied by an adhesive web, separating the dampened and adhesive webs and applying a stiffening web to the separated dampened web.

5. The method of producing copies, con-

sisting in subjecting to pressure a dampened web of copying material accompanied by manuscript sheets, subjecting the dampened web to pressure accompanied by an adhesive web, separating the dampened and adhesive webs, applying a stiffening web to the separated dampened web and applying a transparent web to the separated adhesive web.

6. The method of producing copies, consisting in subjecting to pressure two webs of dampened copying material accompanied by a sheet of manuscript, applying an adhesive web to one of the webs of copying material, and separating the second copying web from the adhered copying and adhesive webs.

FRIEDRICH GUSTAV JULIUS POST.

Witnesses:

MAX LEMCKE,

OTTO W. HELLMRICH.